

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

On page 1 after the title, please insert the following heading:

FIELD OF THE INVENTION

On page 1 before line 10, please insert the following heading:

BACKGROUND OF THE INVENTION

On page 2 at line 25, please insert the following heading:

BRIEF DESCRIPTION OF THE INVENTION

On page 4 after line 8, please insert the following heading:

BRIEF DESCRIPTION OF THE FIGURES

On page 4 before line 20, please insert the following heading:

DETAILED DESCRIPTION OF THE INVENTION

On page 6, please amend the paragraphs at lines 6-27 as follows:

The oxidation rate is controlled, for a given oxidizing atmosphere, as a result of controlling the final temperature of the strip 1 as it leaves the heating means of zone 8 and the residence time of the strip 1 in the zone 8 and between the zone 8 and the inlet of the furnace 3. The combination of these parameters is optimized depending on the grade of steel to be treated, the speed of the line and the thickness and width of the strip.

The heating means of zone 8 is chosen to have a low thermal inertia and a high reactivity so as to maintain control of the surface oxidation of the strip during transient phases brought

about by changes in the speed of the line or changes in geometry of the strip 1. This heating means [[8]] may consist of a gas furnace, of the naked flame or indirect heating type, but preferably this heating means will consist of an electromagnetic induction furnace. The induction furnace has at least one induction coil that can be moved up to or away from the galvanizing furnace in order to vary the heating rate produced.

On page 7, please amend the paragraph at lines 1-17 as follows:

FIG. 2 shows the temperature variation of a point on the strip 1 plotted on the y-axis as a function of the position of this point on the line plotted on the x-axis. Upstream of the heating means [[8]], the temperature of the strip is low, for example below 100°C, and corresponds to the segment 9. As the strip 1 passes through the heating means of zone 8, its temperature increases, for example as per the inclined segment 10. The temperature of the strip 1, from the point where it leaves the heating means of zone 8 up to the point where it enters the furnace 3 remains approximately constant, as shown schematically by the segment 11- the oxidation treatment continues during this phase. Within the chamber of the furnace 3, the strip 1 will continue to be heated in a cycle tailored to its metallurgy and shown symbolically by 12.

On page 8, please amend the paragraphs at lines 12-37 as follows:

One possible way consists in moving the heating means of zone 8 along the direction of the strip 1, as illustrated schematically in FIG. 4 by the dashed arrow 14. For a given strip speed, when the heating means [[8]] is brought closer to the furnace 3, the treatment type-time decreases, whereas when the heating means [[8]] is moved further away from the furnace the treatment time increases.

A second possible way is illustrated by FIG. 5. The heating means of zone 8 are stationary and, between the heating means [[8]] and the furnace 3, the strip 1 passes over a fixed roll 15 and over a moving roll 16, which can be moved parallel to the direction of the strip as illustrated schematically by the arrow 17. When the moving roll 16 is moved to the right, the length of strip between the heating means [[8]] and the furnace 3 increases, thereby increasing

the duration of the oxidation treatment. Conversely, when the moving roll 16 is moved to the left in FIG. 5, the length of strip decreases, thereby reducing the treatment time. This arrangement with a moving roll 16 and two horizontal strip strands may be repeated several times with several rolls and several strands of variable length, so as to increase the length of strip between 8 and 3 and to increase the possible variation in this length.

Please amend the paragraphs beginning on page 8, line 39, through page 9, line 21 as follows:

FIG. 6 shows an alternative embodiment of FIG. 5, in which the heating means [[8]] are stationary and the strip 1 passes over two fixed rolls 20 and 21 and over one moving roll 19, which can be moved perpendicular to the main direction of the strip as illustrated schematically by the arrow 18. When the moving roll 19 is moved upwards, the length of strip between the heating means [[8]] and the furnace 3 increases, thereby increasing the oxidation treatment time. Conversely, when the moving roll 19 is moved downwards in FIG. 6, the length of strip decreases, thereby reducing the treatment time. This arrangement with a roll 19 and two vertical strands may be repeated several times so as to increase the length of strip between 8 and 3 and to increase the possible variation in this length.

It will be understood that all the combinations of fixed rolls and moving rolls allowing the length of strip between the heating means [[8]] and the inlet of the furnace 3 to be varied make it possible to vary the strip oxidation time and may be implemented within the context of this invention.

On page 9, please amend the paragraph at lines 29-39 as follows:

It will also be understood that it is possible to combine controlling the temperature of the strip as it leaves the heating means [[8]] with controlling the duration of oxidation according to the characteristics of the material and to the intended objectives. This control of the temperature and of the treatment time, and also the operation of the corresponding actuators, is performed by the computer 7 according to the product data input by the operator and also the measurements

carried out by the sensors, such as 4, 5, and 6 for example.

On page 10, please amend the paragraph at lines 9-18 as follows:

The galvanizing line according to the invention constitutes a flexible production tool allowing economic galvanizing of various grades of steel, irrespective of the nature of their additives, without any defect in the zinc coating on their surface. The control means 7 and the heating means [[8]], owing to the speed with which they can be adapted, allow the oxidation control process to be adapted to products of any dimensions and to any variation in the speed of the production line.